

Stable aqueous solutions comprising titanium and zinc and process therewith

Description of Technology: This invention relates to a catalyst composition comprising a stable aqueous solution of organic titanium and zinc complexes and to a process for using the composition in, for example, esterification, transesterification, or polymerization of a carbonyl compound.

Patent Listing:

1. **US Patent No. 6,855,797**, Issued February 15, 2005, "Stable aqueous solutions comprising titanium and zinc and process therewith"

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Market Potential: Polyesters such as, for example, polyethylene terephthalate, polytrimethylene terephthalate and polybutylene terephthalate, generally referred to as "polyalkylene terephthalates", are a class of important industrial polymers. They are widely used in thermoplastic fibers, films, and molding applications.

Polyalkylene terephthalates can be produced by transesterification of a dialkyl terephthalate ester with a glycol followed by polycondensation or by direct esterification of terephthalic acid with the selected glycol followed by polycondensation. A catalyst is used to catalyze the esterification, transesterification and/or polycondensation.

Benefits:

• <u>U</u>sed as catalyst in esterification, transesterification, polycondensation, or combinations of two or more thereof

Applications:

 Catalyst composition comprising a stable aqueous solution of organic titanium and zinc complexes